cell either completely lacking or reduced in GS activity with the vector.

Please add the following new claims:

39.   A method of using an isolated DNA sequence encoding part or all of the gene for glutamine synthetase as a hybridization probe for the detection or quantification of genes or mRNA transcripts encoding glutamine synthetase, comprising:

a) isolating a sample of nucleic acid from a cell population of interest;

b) contacting the nucleic acid with the isolated DNA sequence conjugated to a detectable label under conditions of appropriate stringency; and

c) detecting and/or quantifying the presence of DNA or mRNA encoding glutamine synthetase by detecting or measuring the presence or quantity of label annealed to said sample.

40.   A method of using an isolated DNA sequence encoding all or part of glutamine synthetase for the diagnosis of disease states in which the level of GS in a patient is altered, comprising:

a) isolating a sample of nucleic acid from the patient of interest;

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b) contacting the nucleic acid with the isolated DNA sequence conjugated to a detectable label under conditions of appropriate stringency; and

c) detecting and/or quantifying the presence of mRNA encoding glutamine synthetase by detecting or measuring the presence or quantity of label annealed to said sample.

41. The method of claim 38 wherein the cell population of interest is derived from a different species than that from which the GS probe is derived.

42. The method of claim 13 wherein the cell population of interest is derived from a different cell type than that from which the GS probe is derived.

REMARKS

Claims 1-38 were pending in this application. Claims 1-34 and 36-38 have been canceled. Claim 35 has been amended and new claims 39-42 have been added. Thus, claims 35 and 39-42 are now pending.

New claims 39-42 were added in lieu of amending claims 12 and 13 to place the subject matter originally recited therein in better condition for allowance. Support for the newly recited subject matter can be found in the

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